

Buffalo Niagara RIVERKEEPER
Many Hands Healing Our Watershed Cooperative Program Section 5 - Work Plan

I. Project Title and Project Purpose Statement

Project Title: Many Hands Healing Our Watershed Cooperative

Summary of Proposed Project

The Many Hands Healing Our Watershed Cooperative will provide refugee, immigrant, disadvantaged and minority residents of local Environmental Justice (EJ) communities with the knowledge, tools and actionable steps to contribute to solving environmental problems that exist within their neighborhoods. RIVERKEEPER and our partners will collaborate to directly prevent pollution and increase community capacity for action in the following ways:

1. Initiate a sustainable local Rain Barrel manufacturing program where the rain barrels produced will be sold and donated throughout the affected communities. This will result in direct reduction of stormwater pollution and education of residents in watershed health, as well as reducing wastewater treatment costs and filling a regional need for a green product.
2. Through demonstration workshops and neighborhood tours, deliver information to the affected communities that will lead to behavior change and direct reduction of their exposure to toxics from eating contaminated local fish and pathogens from contacting area waterways.
3. Provide multiple opportunities for residents to act on this information by participating in activities that will directly reduce water pollution, contribute to the water quality knowledge base, and increase diversity of riparian plant life. Activities will include shoreline cleanups, volunteer water quality monitoring, and volunteer riparian restoration plantings.

Deliverables met under the proposal will include fabrication of 100 Rain Barrels using recycled plastic food containers; 50 of which will be donated and the remainder sold by PUSH to contribute to program sustainability; two regional and three neighborhood shoreline cleanups, eight educational workshops, two environmental justice walking tours and two environmental justice kayak tours, two urban riparian restoration plantings, and two water quality monitoring trainings.

The project will be carried out in the environmental justice communities of the City of Buffalo and the City of Niagara Falls. The zip codes of 14201, 14202, 14204, 14206, 14207, 14209, 14210, 14213, 14214, 14216, 14220, 14301, 14302, 14303, 14304 and 14305 will be significantly impacted by the collaborative effort.

The *Many Hands Healing Our Watershed Cooperative* will address issues designated in the Section 104(b) (3) of the Clean Water Act. RIVERKEEPER and partners will conduct a series of demonstrations, workshops, hands-on activities, and community building projects for participating community members, so that they gain insightful experience, knowledge, skills, and opportunities in environmental protection, pollution prevention, reducing exposures to toxic substances from locally caught fish, and revitalizing much-needed wildlife habitat in public parks in the watershed. In addition, the proposed project will connect participating communities with their watershed, empower them to engage actively in freshwater protection advocacy, and inspire them to become environmental stewards.

Buffalo Niagara RIVERKEEPER has established strong relationships with influential community partners, civic groups, faith based organizations and agencies. Major partners, who have committed and signed MOAs for the proposed project, are:

- 1) PUSH Buffalo – Community-based non-profit organization;
- 2) Catholic Charities of Buffalo – Faith-based organization;
- 3) Burmese Community Support Center – Local community development organization;
- 4) Grant-Amherst Business Association – Local business entity;

II. Environmental and/or Public Health Information about the Affected Community

The Characteristics of the Affected Community

The Buffalo and Niagara Rivers have been impaired by more than a century of heavy industrial pollution. Their toxic sediment, containing PCBs, PAH, industrial organics and heavy metals from industrial sources, resulted in the EPA designating the rivers as Areas of Concern (AOC) in 1987. According to the US EPA, fish consumption advisories have been established for the Buffalo River based on significant anomalies in fish (87% in bull head) and benthic deformities (20-25%). Fish consumption advisories have also been established for the Niagara River and many of its tributaries due to pollution from PCBs, Dioxin and Mirex.

In addition to legacy contaminants, Buffalo's waterways are severely degraded by polluted runoff from urban point and nonpoint sources flowing through combined and separated sewer overflows. The resulting bacterial levels, trash, and odors make local waterways unswimmable, unattractive and dangerous to recreational users, fish, and wildlife alike. A majority of citizens are not actively engaged in the stewardship of the water itself and are often uninformed about the potential health risks resulting from exposure to water-borne contaminants. Awareness and compliance with sport fish consumption advisories are weak, despite substantial governmental investment into health advisories designed to inform anglers of the dangers of consuming locally caught fish.

Buffalo's diverse and ever-increasing population of refugees, asylees and immigrants comprise a central target population for this project proposal. Erie County resettles nearly twenty-five percent of all refugees arriving in New York, more than any other county in the state. The International Institute of Buffalo, a local resettlement agency, states that refugee families are settled in Buffalo at a rate of at 1,200-1,300 individuals per year, a number expected to rise. Currently refugee and immigrant populations are primarily Burmese, Karen, Nepali, Somali, and Iraqi, with resettlement agencies anticipating Congolese in the near future. Approximately 500 additional refugees relocate from other cities and settle in Buffalo annually due to factors such as availability of affordable housing, reputable resettlement programs, established refugee communities and family ties. Many of these refugee communities, especially Burmese, represent cultures with traditions that emphasize the consumption of fish. Moreover, these refugee and immigrant communities are not aware of water contamination issues, environmental history of the Buffalo-Niagara region, and health risks associated to harmful pollutants in waterways.

Minority populations and economically disadvantaged urban communities of Buffalo are also important target groups for the proposed project. Buffalo faces high hurdles: nearly 30% of our residents live in poverty, a rate surpassed only by Detroit among the nation's largest cities. According to Literacy New York's Buffalo-Niagara chapter, 1 in 5 residents of Erie County is functionally illiterate and 1 in 3 residents of the City of Buffalo are functionally illiterate.

Between 41-44% of adults with the lowest literacy skills live in poverty, based on federal poverty guidelines.

Often, the only available recreational spaces within the impoverished areas of the city are local rivers and creeks within the Great Lakes Areas of Concern. Many of the less contaminated fishing areas on the Buffalo and Niagara Rivers are only accessible by boat, excluding socioeconomically disadvantaged anglers. As a result, these anglers and their families are relegated to polluted riverbanks and thereby exposed to unsafe levels of bacteria from contact with water or industrial toxics from the consumption of contaminated fish. These individuals often lack environmental awareness and literacy, which prevents them from participating in efforts to reduce exposures to toxic substances and improve water quality in their local waterways.

The Local Environmental and Health Issues that the Project Seeks to Address

Exposure to toxics through consumption of contaminated local fish: By informing subsistence fishing communities about the dangers of consuming contaminated fish and providing demonstrations on how to safely cook and clean fish, the project will reduce community exposure.

Combined Sewage Overflows: By manufacturing and distributing 100 Rain Barrels, the project will reduce stormwater runoff that contributes to combined sewage overflows. In concert with the growing list of grassroots efforts to implement Green Infrastructure solutions in WNY, this effort will move us towards solving the stormwater pollution problem.

Exposure to pathogens through contact or passive recreation in area waterways: Demonstration Workshops, walking and paddle tours in environmental justice communities will educate individuals on the risks of exposure to bacterial pathogens resulting from Combined Sewage Overflows. This knowledge will help to change behaviors and reduce exposure.

Degradation of aesthetics of waterfront sites: The five Shoreline Cleanup events will directly decrease the amount of dangerous debris from overflows, runoff and direct dumping that makes its way into Niagara River and tributaries.

How the Affected Community May be Disproportionately Impacted

Persistent toxic contaminants, such as those present in the Niagara River watershed, bioaccumulate in the tissues of fish. As these contaminants move up the food chain, amounts found in fish can be over a million times greater than the concentrations detected in the water column. When humans consume contaminated fish, chemicals can accumulate in their bodies and pose serious health risks, especially for children, women who are pregnant or breastfeeding, and women who may have children in the future. The health risks for those who subsist on locally caught fish are exacerbated beyond the health risks to those who fish for sport, yet many people have little choice but to eat the fish they catch despite the risks.

Due to lack of environmental awareness, economically disadvantaged communities and refugee populations are often unaware of the environmental and health risks of combined sewer overflows, industrial contamination and bioaccumulation of toxic substances in local fish. These communities may not be participating in community projects to preserve fresh water and prevent pollution, nor are they acquiring sufficient skills and knowledge necessary to reduce exposure to toxic chemicals and to protect their communities from related health risks.

III. Organization's Historical Connection to the Affected Community

The History of the Organization's Involvement with the Affected Community

RIVERKEEPER has been engaging refugees, minorities and other subsistence fishing communities in the region for seven years and has been advocating for protection and restoration of the Niagara River watershed for the last 27 years. Our involvement with environmental justice communities began during the Riverwatch Volunteer Water Monitoring at waterfront sites in and around Buffalo, where RIVERKEEPER recognized the extensive use of local waterways for swimming, fishing and fish consumption. Beginning with angler outreach and angler participation in water testing funded through NYSDEC Environmental Justice grants, our involvement expanded when we received EPA Great Lakes Restoration Initiative funding. This grant enabled us to conduct extensive outreach and education to anglers and subsistence fishing communities through the creation and distribution of low-literacy public health materials in five languages, as well as culturally-sensitive instructional designs and workshops.

As a former Coordinator and current participant in the Buffalo River Remedial Action Plan (RAP), RIVERKEEPER works in collaboration with the NYS Department of Environmental Conservation and other local, state and federal agencies towards the goal of delisting the Buffalo River as an Area of Concern. The AOC is comprised entirely of environmental justice communities. Our current programming includes the Young Environmental Leaders Program, which engages high school students from environmental justice communities in an eight-month series of environmental education workshops. Residents participating in our Riverwatch Water Quality Monitoring program are trained to monitor water quality at 52 sites, many of which fall within targeted communities.

How the Applicant has Worked with the Affected Community's Residents

RIVERKEEPER has produced innovative public health materials in several languages (French, Spanish, Burmese, Nepalese, and low-literacy English) and has conducted extensive outreach to at-risk communities. Our Environmental Justice team has partnered with minority community groups (Buffalo United Front, Burmese Community Support Center, and PUSH Buffalo), refugee resettlement agencies (Jericho Road Ministries, International Institute of Buffalo, and Journey's End Refugee Services) and faith-based organizations (Refugee Monasteries, Churches, and Education Centers). We provide training to community educators, interpreters and doulas to teach their communities and clients about the health risks associated with eating contaminated fish, as well as methods that can be used to make fish meals safer to eat. We reconnect community members to their local waterways through shore-based and kayak-bound educational tours. RIVERKEEPER has designed lesson plans that are both appropriate and relevant to different cultures of refugee and minority anglers, and conducted workshops to improve community involvement in preserving local waterways and protect community members from environmental health risks.

RIVERKEEPER also actively participates and presents at community events, cultural fairs and educational institutions to educate residents about pollution in local waterways, public health risks associated with eating locally caught fish, environmental justice and food security, and risk reduction strategies that can be used to make fish meals safer to eat. RIVERKEEPER constantly invites and recruits residents from disadvantaged communities, and empowers them to engage in community building activities such as Fall and Spring shoreline cleanups.

How the Residents of the Affected Community were Part of the Decision-making Process

The deep network of relationships RIVERKEEPER has established while working with partners on environmental justice projects guides the direction of our work, the languages into which we translate materials, and the information we focus on when producing public health materials and presentations. In essence, those communities who fish and subsist on locally caught fish help decide and determine the scope and content of our environmental justice work. RIVERKEEPER has engaged refugees, minorities and other community members from disadvantaged neighborhood in transformative workshops where they not only contribute new ideas and opinions to improve their communities, but also decide to tackle local environmental issues.

How the Applicant's Efforts have Increased the Community's Capacity

Buffalo Niagara RIVERKEEPER's environmental justice work has empowered local communities to better understand the health risks associated with eating locally caught fish, and what measures they can take when fishing and eating fish to reduce their exposure to dangerous contaminants. In addition, some local refugee and minority communities have begun to take ownership of their waterways and to address freshwater issues within their communities. Through hands-on participation in RIVERKEEPER's place-based educational programs, community leaders have also acquired information, skills and tools necessary to promote the importance of fresh water preservation.

How the Applicant has Maintained and Sustained an Ongoing Relationship

RIVERKEEPER plans to maintain our extensive existing partnership with community organizations, such as Jericho Road Ministries, International Institute of Buffalo, Journey's End Refugee Services, Burmese Community Support Center and Buffalo United Front, to continue our environmental education and public health outreach, and to enhance capacities in local communities. RIVERKEEPER has recruited additional partners, such as PUSH (People United for Sustainable Housing) Buffalo, Catholic Charities of Buffalo, City of Niagara Falls and Grant-Amherst Business Association, to build healthy and sustainable communities in the Niagara River watershed.

IV. Project Description

i) Description of the Activities the Project will Undertake

The proposed project has four major components that would benefit targeted communities: 1) Creation of a Rain Barrel Manufacturing and Distribution Program; 2) Demonstration Workshops and Environmental Knowledge Tours; and 3) Opportunities for Direct Action to protect area waterways. Each component will address the importance and the urgency to protect and preserve local waterways, the connection between health and environment, and capacity enhancement in communities. The details of three components are as follows:

Project Component 1: Rain Barrel Program			
Project Deliverable	Lead Partners	Description	Community Benefits
100 Rain Barrels manufactured from recycled food grade plastic barrels	People United for Sustainable Housing (PUSH) Buffalo	PUSH Buffalo will create a Rain Barrel manufacturing program that will employ neighborhood residents to create Rain Barrels. Through subcontract, this grant will provide PUSH with funds to launch the rain barrel program, which will be designed for sustainability beyond the project period.	<p>Green Jobs: A Rain Barrel manufacturing program would provide much needed employment for West Side residents.</p> <p>Local Sourcing: This project would provide a low-cost, local source for an important element of a regional effort to use Green Infrastructure to reduce stormwater pollution.</p>
100 Rain Barrels distributed to residents and businesses in the affected communities	Grant-Amherst Business Association (GABA), PUSH Buffalo, Catholic Charities of Buffalo	Rain Barrels produced from the PUSH Buffalo program will be distributed free of charge to residents and businesses within the affected communities. Grant-Amherst Business Assoc. will recruit ten businesses to receive a donated Rain Barrel. Other project partners will recruit residents to attend a rain barrel workshop and install a donated Rain Barrel at their home.	<p>Reduced stormwater pollution that causes Combined Sewer Overflows (CSOs): 100 Rain Barrels will prevent 5500 gallons of polluted stormwater from entering the system during each qualifying rain event.</p> <p>Grassroots Education: Rain Barrels in the community provide opportunities to engage homeowners and other community members in stormwater pollution education.</p>
Project Component 2: Demonstration Workshops and Environmental Knowledge Tours			
Project Deliverable	Lead Partners	Description	Community Benefits
Workshop 1 Know Your Watershed	GABA, International Institute, and Catholic Charities of Buffalo	Participants will be introduced to the Niagara River Watershed, community benefits of access to fresh water, and current environmental problems including urban stormwater and combined sewer overflow pollution. RIVERKEEPER's Riverwatch program will be introduced and participants will be encouraged to enroll in Water Monitoring Trainings.	<p>Environmental knowledge and literacy conveyed to target audiences: Members of environmental justice communities will gain knowledge of health risks from polluted local waterways, which will inspire behavioral changes to reduce this risk.</p> <p>Opportunity to act: By introducing the Riverwatch Program, participants are given an opportunity to participate directly in environmental problem solving.</p>

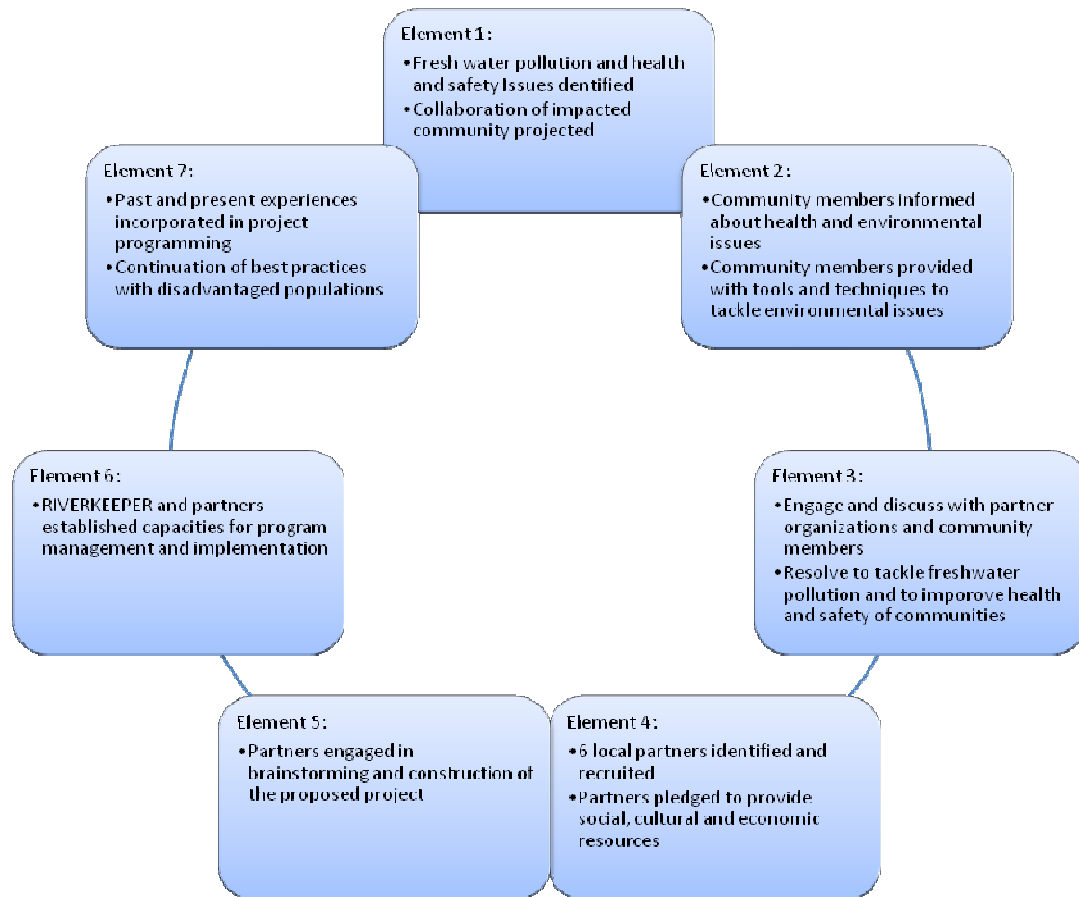
Project Component 2: Demonstration Workshops and Environmental Knowledge Tours (continued)			
Project Deliverable	Lead Partners	Description	Community Benefits
Workshop 2 Grassroots Green Infrastructure: Rain Barrels	PUSH Buffalo, GABA, International Institute, Catholic Charities of Buffalo	Building on themes presented in Workshop 1, the Rain Barrel will be introduced as a grassroots solution to reducing stormwater pollution. Rain Barrel function and installation will be demonstrated. Homeowners and businesses receiving Rain Barrels, along with environmental justice community members, will be recruited to attend.	Opportunity to act: Participants will be introduced to another direct action that they can take to help solve an environmental problem. Community members that are not homeowners will be given materials to present to their landlords to recruit them to receive donated Rain Barrels.
Workshop 3 Exploring Community Green Infrastructure	GABA, International Institute, Burmese Community Support Center, Catholic Charities, PUSH Buffalo	Community members, partners and RIVERKEEPER will visit and explore local green infrastructure sites, including green roofs, rain gardens, permeable pavement and rain barrel installations. The workshop will enhance attendees' understanding of green infrastructure, and allow them to see modern solutions to water quality problems.	Environmental knowledge and literacy enhanced: Community members will gain comprehensive, transferable knowledge of green infrastructure, and understand its critical role in protecting the limited freshwater resource within their communities.
Workshop 4 Fish Consumption Demonstration	GABA, International Institute, Burmese Community Support Center, Catholic Charities	Participants will learn to reduce human exposure to toxic substances in local fish, and understand the process of bioaccumulation using culturally-appropriate, low-literacy accessible materials.	Reduction in exposure to harmful toxics found in local fish: Attendees that regularly consume fish will learn cleaning and cooking techniques as well as species selection to minimize human exposure to toxic contaminants present in local fish.

Project Component 2: Demonstration Workshops and Environmental Knowledge Tours (continued)			
Project Deliverable	Lead Partners	Description	Community Benefits
Two Environmental Justice Walking Tours	GABA, International Institute, Burmese Community Support Center, Catholic Charities of Buffalo, PUSH Buffalo	Multicultural environmental justice walking tours will introduce community members to local waterways, interpret signs of environmental problems impacting their communities, and provide an opportunity for sharing personal knowledge and experience. Tours will explore urban shorelines in targeted communities, highlighting natural, cultural, industrial and environmental histories of the Buffalo-Niagara region.	<p>Place-based environmental knowledge and literacy transferred to target audience: Participants will gain significant learning experiences inspiring action by engaging in culturally-sensitive, environment-oriented discussions along scenic shorelines.</p> <p>Environmental stewardship cultivated: Participants sharing these experiences will grasp the importance of collaborative efforts in preserving fresh water, while establishing meaningful relationships with other members for future action. Participants will be able to transfer this environmental knowledge to other members in their communities.</p>
Two Environmental Justice Paddle Tours	GABA, International Institute, Burmese Community Support Center, Catholic Charities of Buffalo, PUSH Buffalo	Kayak tours will provide opportunities for participants to experience exceptional recreation and reconnect with natural wonders in their “backyard”. Participants will be trained in basic water safety and kayaking skills. Tours will highlight natural, cultural, industrial and environmental histories of the Buffalo-Niagara region.	<p>Place-based environmental knowledge and physical skills developed: Community members will gain paddling skills and a sense of local environmental awareness while enjoying their wonderful freshwater resources.</p> <p>Communities connected to waterways: Participants will be reconnected to their “backyard” waterways, and empowered to take ownership of their water.</p> <p>Environmental stewardship cultivated: Participants sharing these experiences will grasp the importance of collaborative efforts in preserving fresh water, while establishing meaningful relationships with other members for future action. Participants will be able to transfer this environmental knowledge to other members in their communities.</p>

Project Component 3: Opportunities for Direct Action			
Project Deliverable	Lead Partners	Description	Community Benefits
Two large-scale Regional Shoreline Cleanups coordinated by RIVERKEEPER and Project Partners	International Institute, GABA., Catholic Charities of Buffalo	During the Spring of 2015 and 2016, RIVERKEEPER and partners will lead large Shoreline Cleanup events in which volunteers from affected communities will participate in a day of action to remove harmful debris from waterways. In Spring our goal for each cleanup will be 1,500 volunteers participating at 35 sites.	<p>Pollution Prevention: Cleanups will prevent approximately 40 tons of debris from entering the Niagara River system. (Estimate based on past cleanup events.)</p> <p>Community Engagement: Cleanups provide an opportunity for residents of the affected communities to participate directly in protecting water resources and offer the project partners a vehicle for initial engagement with these communities.</p>
Four “Spontaneous” Neighborhood Waterfront Cleanups	PUSH Buffalo and GABA	RIVERKEEPER will organize three spontaneous cleanups at three waterfront sites. Participants will be recruited through RIVERKEEPER and PUSH’s large social networks and through neighborhood festivals. For example, attendees of the annual Rediscover Amherst Street neighborhood festival will be recruited to participate in a spontaneous cleanup of nearby Scajaquada Creek. These events will target the 16-24 year old demographic who communicate extensively through social media.	<p>Direct impact on Waterfront Sites: The flexibility of the spontaneous cleanups will allow targeting of sites that have a great need for stewardship in between the spring and fall cleanups.</p> <p>Direct engagement of the youth demographic: By using social media to engage with young people, RIVERKEEPER and our partners will strengthen our network and further extend our social media reach. The spontaneity of these events will bring a sense of fun and camaraderie while engaging on a critical issue.</p>

Project Component 3: Opportunities for Direct Action (continued)			
Project Deliverable	Lead Partners	Description	Community Benefits
Two Water Monitoring Trainings	International Institute and Burmese Community Support Center	RIVERKEEPER will engage members of the immigrant community in the existing Riverwatch Volunteer Monitoring Program. Participants willing to attend the workshop and volunteer to conduct water monitoring will be recruited by project partners. Trainings will be held in March and June of each year and will be 3 hours long. Two supervised field training excursions will complete the Riverwatch Captain training. Volunteers will then conduct water monitoring once a month from April through November.	<p>Environmental Data Collected by Affected Community: Members of the immigrant communities that are disproportionately affected by the pollution will be actively participating in collection of environmental data that will help inform RIVERKEEPER's broader restoration and advocacy work.</p> <p>Volunteer Network Strengthened: RIVERKEEPER will add diversity to our volunteer network which will allow a larger portion of the community to contribute to our work.</p>
Two Native Tree Planting Events	City of Niagara Falls and Catholic Charities of Buffalo	Two native tree planting events will be held in the City of Niagara Falls: one located at Gill Creek Park, the other along Cayuga Creek. Site preparation and permissions will be provided by the City of Niagara Falls. Each event will engage approximately fifteen volunteers from Catholic Charities of Buffalo. RIVERKEEPER will instruct and guide volunteers on how to plant trees and the importance of trees to riparian and wildlife habitat. Participants will reflect on how their work has impacted their lives and the lives of others.	<p>Habitat Restoration: Trees planted will help to stabilize stream banks, assist in flood management, add greater wildlife diversity, improve water quality, absorb air pollution and pesticides, and add aesthetic beauty to the community's landscape.</p> <p>Community Engagement: Planting events will allow youth the opportunity to learn about teamwork, community, and science in a hands-on experiential way. Participation in this event and time to reflect on it will further advance the goals of their mentorship program.</p>

The proposed project is also aligned with the EPA Environmental Justice Collaborative Problem-Solving Model. Our proposed collaboration will successfully encompass all seven elements as followed:



ii) Description of How the Organization and its Partners will Work Together

Partner	Mission of Organization	Role	Resources and Activities	Status of Commitments
Buffalo Niagara RIVERKEEPER	Local nonprofit organization dedicated to protection of rivers and connecting public to water; based in Buffalo	Project lead	Secure funding, administer grants, overall project management and development, direct outreach, coordinate projects and partners	Committed to staff time for project management and implementation

Partner	Mission of Organization	Role	Resources and Activities	Status of Commitments
People United for Sustainable Housing (PUSH Buffalo)	Community-based organization dedicated to community organizing, building sustainable neighborhoods, and improving community capacities	Major partner and MOA signatory	Staff time for recruitment of participants, development of programming, assistance, and evaluation	Committed – See MOA.
Catholic Charities of Buffalo	Faith-based community organization that assists disadvantaged communities	Major partner and MOA signatory	Staff time for recruitment of participants,	Committed – See MOA.
International Institute of Buffalo (IIB)	Primary 501(c) 3 organization dedicated to settling refugees and immigrants in buffalo and assisting them to be self-sufficient, contributing members of their new community	Minor partner	Staff time and expertise in cultural competency, provide link to refugee communities and network of community groups	Committed to recruit members of their constituency to attend educational workshops.
Burmese Community Support Center	Community development organization dedicated to assisting the Burmese community in Buffalo and building capacities	Major partner and MOA signatory assistance	Provide link to Burmese community in Buffalo, and recruitment of participants	Committed – See MOA.
Grant-Amherst Business Association (GABA)	Local business association dedicated to betterment of neighborhoods, communities and region	Major partner and MOA signatory	Provide link to business community, and recruitment of participants	Committed – See MOA
City of Niagara Falls	Local government agency	Minor Partner	Provide link to the City, and support in implementation of native tree planting	Committed to permit planting on two shoreline sites within the city.

V. Organizational Capacity and Programmatic Capability

Buffalo Niagara RIVERKEEPER possesses the programmatic capability to accomplish all of the objectives of the Many Hands Healing Our Watershed Cooperative. Through our diverse citizen action programming, our staff has gained the necessary and relevant knowledge of the environmental concerns in our watershed, along with the experience of conveying this knowledge to the public through environmental education. Our role as a leader in the restoration and protection of our watershed has led us to develop an extensive network of local and regional partners that we will leverage to assist with the execution of the project. Through the years we have built our organizational capacity to secure and manage both large and small grants and deliver results while maintaining rigorous fiscal oversight on all projects.

The Environmental Justice team at RIVERKEEPER has been implementing high impact projects over the past seven years, including our Enhanced Fish Consumption Advisories. Capacity has been created for our Riverwatch Water Quality Monitoring program which currently has 35 highly trained volunteers monitoring 54 sites throughout the year. We have supplied over 800 rain barrels to the public through both sales and donations, diverting millions of gallons of stormwater runoff from our waterways and collaborated on numerous Green Infrastructure projects. Since 2011, our River Tour program has connected over 600 individuals to the water through kayak tours, including many underprivileged youth from environmental justice communities. The resources and capacity from all of these key programs will be leveraged to obtain the goals and objectives of the project.

Financial and IT capacity is demonstrated through the use of QuickBooks accounting program that is used for account management and Excel databases that are used to track program deliverables. RIVERKEEPER performs an annual financial audit with a certified public accountant. These systems will be used to track and manage the proposed project.

RIVERKEEPER's partners on the project all bring resources that will contribute to the overall goals and objectives of the project. Since 2005 PUSH Buffalo has been fighting for affordable housing, creating green and living wage jobs for residents, and promoting overall social justice on Buffalo's impoverished West Side. They will recruit participants from their membership base and create jobs through rain barrel construction and installation. As the most comprehensive human service provider serving all eight counties of WNY, Catholic Charities of Buffalo serves people in need of every faith, race, or walk of life impacting the lives of the nearly 138,000 people each year.

RIVERKEEPER's accomplishments in establishing partnerships on related projects include:

- Developing the Buffalo River Remedial Action Plan, negotiating a first-of-its kind agreement with the USEPA to implement the Plan, securing \$5 million in funding to date for cleanup of historic sediment contamination in the Buffalo River Area of Concern.
- Representing a coalition of environmental groups during relicensing hearings for the NYPA Niagara Power Plant, resulting in securing \$450 million to fund restoration and establishment of the Niagara River Greenway.
- Developing and securing funding for the Young Environmental Leaders Pilot Project to engage youth from two at-risk urban schools in an intensive environmental education and community building workshop series.

- Educating adults through River Academy, a field-based exploration of Niagara River issues offered for course credit through a unique partnership with Erie Community College.
- Monitoring water quality at 52 public access sites throughout the watershed using 30 highly trained volunteers through our Riverwatch program.
- Producing innovative fish consumption advisories in multiple languages (French, Spanish, Burmese, Nepalese, and low-literacy English) and conducting direct outreach to educate subsistence fishermen.
- Partnering to develop the Scajaquada Creek Initiative Watershed Management Plan.
- Recruiting 2,000 volunteers to remove over 20 tons of trash from our shorelines at our biannual cleanups events.
- Providing Community Green Infrastructure presentations to encourage installation of rain gardens, rain barrels, green roofs and permeable pavement throughout the City of Buffalo.
- Developing a rain garden demonstration project at an inner city library.
- Securing funding to provide 200 rain barrels without cost to families and community organizations.

Listing of Recent Federally-Funded Assistance Agreements

- 1) GL-97217410, Enhanced Fish Consumption in Buffalo Niagara Region, US EPA Great Lakes National Program Office, Elizabeth VanRabenswaay, all required reports are submitted.
- 2) GL-97217510, Buffalo River AOC Habitat Restoration Riverbend, US EPA Great Lakes National Program Office, John Cantilli, all required reports are submitted.
- 3) GL-97217610, Buffalo River Remedial Action Plan, US EPA Great Lakes National Program Office, Fred Luckey, all required reports are submitted.
- 4) GL-97217710, Niagara River Habitat Restoration Project, US EPA Great Lakes National Program Office, Fred Luckey, all required reports are submitted.
- 5) GL-00E00841-0, NYS Teachers Get W.E.T. for Great Lakes, US EPA Great Lakes National Program Office, Alicia Reinmond, all required reports are submitted.

VI. Qualifications of the Project Manager (PM)

Robbyn Drake has conducted program development and implementation, staff and volunteer management, restoration project management and fundraising for Buffalo Niagara RIVERKEEPER since April 2003. Robbyn initiated RIVERKEEPER's original environmental justice programming through the Riverwatch volunteer water monitoring and angler outreach campaigns, by seeking and receiving funding through the NYSDEC Environmental Justice Office. She has developed a network of environmental community contacts through these programs. She also developed the concept, model, curriculum, logistics and funding for the successful River Academy high school and adult place-based environmental education programs. Robbyn holds a B.S. in Environmental Studies from SUNY Buffalo, with progress to Master of Science at the SUNY College at Buffalo's Great Lakes Center, and is an American Canoe Association Certified Instructor for Canoe and Kayak. She will manage staff participation, program and curriculum development, logistics, communications with project partners, and grant reporting.

VII. Past Performance in Reporting on Outputs and Outcomes

Listing of Recent Federally-Funded Assistance Agreements					
Grant #	Title of Project & Schedule	Amount of Funding	Granting Agency	Point of Contact	Reporting on outputs/outcomes
GL-97217410	Enhanced Fish Consumption in Buffalo Niagara Region	\$224,997	US EPA Great Lakes National Program Office	Elizabeth VanRabensway 212-637-3881	All required reports are submitted.
GL-97217510	Buffalo River AOC Habitat Restoration Riverbend	\$657,245	US EPA Great Lakes National Program Office	John Cantilli 212-637-3810	All required reports are submitted.
GL-97217610	Buffalo River Remedial Action Plan	\$600,000	US EPA Great Lakes National Program Office	Fred Luckey 212-637-3853	All required reports are submitted.
GL-97217710	Niagara River Habitat Restoration Project	\$243,936	US EPA Great Lakes National Program Office	Fred Luckey 212-637-3853	All required reports are submitted.
GL-00E00841-0	NYS Teachers Get W.E.T. for Great Lakes	\$168,985	US EPA Great Lakes National Program Office	Alicia Reinmond 212-637-3827	All required reports are submitted.

VIII. Expenditure of Awarded Grant Funds

RIVERKEEPER will expend grant funds as demonstrated in the Detailed Budget (Section 6). RIVERKEEPER maintains detailed accounts of all grant awards and expenditures, and these spreadsheets are updated by the CFO and distributed to the Directors and PM on a monthly basis. Personnel fund expenditures are planned and tracked through our regularly updated annual organizational work plan budget, which identifies staff hours and expected vs. funds available for each grant task accomplished. Supply funds will be expended and tracked through our established purchase order system, which includes budget checks by both the PM and the CFO. The PM will meet weekly with staff to assure that project deliverables are fully accomplished on time, and address any unexpected difficulties. If a condition were to come to our attention that could require changes to the budget, the PM would communicate these circumstances immediately to our EPA point of contact.

IX. Quality Assurance Project Plan (QAPP) Information

A Quality Assurance Project Plan will be required for this project. The QAPP will be created for the collection of environmental water samples for chemical and biological analysis. This will be for the water quality monitoring portion of the project only.